AUTHOR KALIKHMAN S.G., Regular Member of the Society 108-6-6/11*
TITLE Compensating Filter with Punctiformly Distributed Selection. (Balansnyye fil'try sosredotochennoy selektsii -Russian)
PERIODICAL Radiotekhnika, 1957, Vol 12, Nr 6, pp 52 - 59 (U.S.S.R.)

ABSTRACT The method suggested here for the analysis of compensating filters with punctiformly distributed selection is based on the agreement of sections according to characterizing resistances and can be extended to systems with any number of sections. It must, however, be taken into consideration that in order to warrant the required phase compensation, the number of III_4-sections must be lower by one than that of the III_1-sections. The here suggested method is considerably more simple than the schemata suggested by Brauns (Nullstellen Bandfilter, "Funktechnik" Nr 5, 1955) and G.Petrich (Nullstellen Bandfilter "Hochfrequenz und Elektronok" Vol 64, fasc. 3, 1955). Quantitative relations for the computation of filter sections are given. In conclusion experimental data are given, which confirm the opinion, that the application of these filters in a radio receiving set considerably improves its selectivity in the neighboring channel. (5illustrations, 2 table, 1 Slavic reference).

ASSOCIATION Not Given.
PRESENTED BY
SUBMITTED 28.11.1956
AVAILABLE Library of Congress.
Card 1/1

Radio Device for Simultaneous Speech Translation into Eight Languages.

the block-diagram described in the article. The operation of direct and double translation systems is described, too. The common antenna has a horizontal loop laid along the perimeter of the conference room. Vertically-polarized magnetic antennas are built in the receivers. Fig. 2 shows the transmitting part containing eight AM operating transmitters with a frequency-band of 40-145 kc and frequency intervals of 15 kc, as well as two reserve transmitters. Each transmitting unit contains the tubes of "GU-50" and "6Zh1P" types and consists of a master generator, a modulator and a modulated stage. Some other details of this unit are given. The power supply of the transmitter is autonomous and furnished by the a.c. network of 220 v. Two rectifiers feeding the anode and grid circuits contain germanium power diodes. The parallel operation of channels is effected by means of the adding and reserve block. The advantages of the loop antenna described in the article are only maintained, if its length is small with regard to the shortest of the operating waves. The device contains two types of subscriber's receivers: one having five fixed frequencies of 85, 100,

111-58-5-6/27

Radio Device for Simultaneous Speech Translation into Eight Languages.

115, 130, and 145 kc and the other one having five frequencies of 40, 55, 70, 85 and 100 kc. Both receivers have identical circuit-diagrams and design. They are shown in fig. 3. Each receiver contains three junction-transistors of "P6V" type and one germanium diode of "D2V" type. Its power supply is furnished by a dry battery of 1.5 v and assures a continuous operation of the receiver for 100 h. The headphones are of "TA-4" and "Ser'gi" types. The operator's panel (Fig. 4) contains all l.f. (amplifier) and switchboard units. Their operation is described. The microphone amplifiers, with an output level of 100 mv, contain two transistors of "P1D" and "P6V" types and are matched, at the input, with the "MD-46" type microphone. The line amplifiers have five transistors of "P6D", "P6V" and "P3V" types, as well as two germanium power diodes of "DGTs-24" type. The output power is 2 w , the sensitivity 30 mv and the non-linear distortion factor is 5%. The device also contains various control panels serving for direct translation, double translation or for the operation according to round-table system. There are 7 photos and 1 diagram.

AVAILABLE: Library of Congress

Card 3/3 1. Radio-Multiple operation 2. Speech transmission

67496

SOV/112-59-20-42992

9.1000

Translation from: Referativnyy zhurnal: Elektrotekhnika, 1959, Nr 20, p 169, (USSR)

AUTHOR: Kalikhman, S.G.

TITLE: Ferromagnetic Reception Antennas

PERIODICAL: Tr. Gos. Soyuzn. n.-i. in-ta radioveshchat. priyema i. akust., 1958, Nr 10, pp 3-18

ABSTRACT: The application of ferrite magnetic antennas (FMA) in valve and transistor receivers is discussed. It is shown that a FMA with a high permeability of the core has a lower antenna effect than a rod antenna. It is advisable to increase the quality (Q) of FMA in a valve receiver until the pass-band obtained is greater than prescribed, and in a transistor receiver without limitation. The radiation height (h_σ) of FMA is determined. At an equal h_g a multirod FMA consumes less magnetic material than a single-rod one. A design of a 2-band (LW and MW) FMA is suggested. It is advisable to use ferrite rods of

Card 1/2

C

KALIKHMAN, S. G., Candidate Tech Sci (diss) -- "The problem of simultaneous operation or radio receivers on a common antenna". Leningrad, 1959. 25 pp (Min Communications USSR, Leningrad Electrical Engineering Inst of Communications im Prof. M. A. Bonch-Bruyevich), 120 copies (KL, No 24, 1959, 137)

KALIKHMAN, S. G.,

"On the Problem of Simultaneous operation of Radio Receivers with a Co,,om Antenna." Dissertation for the Degree of Candidate of Sciences, Leningrad Electrotechnic Inst. of Communication im. M. A. Bonch-Bruyevich. Defense held on 14 May 1959.

The principal engineering and theoretical problems invlolved in the simultaneous operation of an arbitrary number of radio receivers with multiple utilization of the receiving antenna have been developed. Circuits and engineering methods are proposed for the calculation of high-efficiency all-wave transformers. A procedure is developed for engineering design of concentrated-selection systems, made up of inhomogeneous band pass elements with conductive and transformer coupling, along with an explanation of the features of the design of filters for concentrated slection when used in transistor devices. The problem of matching the impedance of the antenna with the feeder over a broad range of radio frequencies is solved.

Izv Vysshikh ucheb. zaved. MViSSO SSSR po razdelu Radiotekhnika, vol. 6, No. 1, 1963 p. 98-102 (Original checked--Cand. of Sciences as in original.)

KALIKHMAN, V. A.

Ф. Е. [illegible]

Переходный процесс в полупроводниковом диоде при протекании через него в прямом направлении импульса тока малой длительности.

Н. С. [illegible]

Приближенный метод расчета переходных процессов в полупроводниковых триодах при больших сигналах.

Я. Д. [illegible]

Исследование работы плоскостного полупроводникового триода в схеме генератора синусоидальных колебаний при большом уровне сигнала.

М. А. Берг

Отрицательное сопротивление в двухэлектродных полупроводниковых приборах.

С. А. Гаряинов

Полупроводниковые приборы с отрицательным сопротивлением и их применение в радиотехнических схемах.

10 июня

(с 10 до 16 часов)

Совместное заседание с секцией электронно-вычислительной техники.

14

В. Н. [illegible]

Динамический триггер на полупроводниковых приборах.

А. Ю. [illegible],
В. В. [illegible],
В. Н. [illegible],
Г. В. [illegible],
В. А. Калихман

Специальные элементы цифровых вычислительных машин на полупроводниковых приборах.

Л. Н. [illegible],
Т. М. [illegible],
Н. С. [illegible],
В. А. [illegible],
В. Н. [illegible],
В. Н. [illegible],
А. Г. [illegible],
Ю. Н. [illegible]

Каскады полупроводниковых вентилей в узлах цифровой вычислительной машины.

В. Н. [illegible]

Фронты выходных импульсов в транзисторных ключах с общим эмиттером с учетом емкостной нагрузки коллектора.

15

Report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNORiE), Moscow, 8-12 June. 1959

KALIKHMAN, V. A.

11 июня
(с 16 до 22 часов)

Л. Н. [illegible],
Р. Р. [illegible]

Методика испытания магнитофонов и магнитных головок.

А. А. [illegible],
Н. Н. [illegible]

О направлении намагниченности ленты при записи [illegible] головками.

А. А. [illegible]

Об измерении уровня при магнитной записи звука.

В. А. [illegible]

К теории магнитных сигналограмм.

12 июня
(с 10 до 16 часов)

[illegible],
[illegible]

Вопросы теории и применения [illegible] магнитных головок.

60

М. Г. [illegible]

Ферриграфическое устройство для визуального наблюдения за несколькими одновременно протекающими процессами.

14. СЕКЦИЯ ЭЛЕКТРОННО-ВЫЧИСЛИТЕЛЬНОЙ ТЕХНИКИ

Руководитель Л. И. Гутенмахер

10 июня
(с 10 до 16 часов)

Совместное заседание с секцией полупроводниковых приборов

В. Н. [illegible]

Динамический триггер на полупроводниковых триодах.

А. Ю. [illegible],
[illegible],
[illegible],
[illegible],
Г. В. [illegible]

Спусковые элементы цифровых вычислительных машин на полупроводниковых приборах.

[illegible],
[illegible],
[illegible]

61

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNORiE), Moscow, 8-12 June. 1959

S/020/60/132/01/28/064
B014/B014

AUTHORS: Kalikhman, V.L., Umanskiy, Ya.S.

TITLE: Investigation of the Initial Stages of the Formation of Diffusion Porosity in the Alloys L62 and N80Kh20 by Using the Method of Small-angle Scattering of X-Rays

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 1, pp. 108-109

TEXT: The formation of porosity by elimination of the volatile component of alloys was studied in a vacuum chamber by using O. Kratky's method (Ref. 4). As a result of the elimination of zinc, the samples of the L62 alloy were in an atmosphere saturated with zinc when they were annealed at 750°. Similarly, the samples of the alloy of the type N80Kh20 were in an atmosphere saturated with chromium when they were annealed at 1200°. The results and the X-ray pictures shown in Fig. 2 are discussed. From the results obtained it follows that the pores begin to form on the surface of impurities. First, thin cracks are produced, which expand along the surface of the impurities. These results agree with the fact that the tendency to form pores is closely connected with

Card 1/2

Investigation of the Initial Stages of the Formation of Diffusion Porosity in the Alloys L62 and N80Kh20 by Using the Method of Small-angle Scattering of X-Rays

S/020/60/132/01/28/064
B014/B014

the amount of impurities. There are 2 figures and 6 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy institut stali im. I.V. Stalina (Moscow Steel Institute imeni I.V. Stalin)

PRESENTED: December 29, 1959, by G.V. Kurdyumov, Academician

SUBMITTED: December 28, 1959

Card 2/2

KALIKHMAN, V. L., Cand. Phys-Math. Sci. (diss) "Investigation of Diffusion Sub-microscopic Porosity in Metals and Alloys by the Method of Small-Angle Scattering of X-Rays." Moscow, 1961, 13 pp (Central Scientific Research Institute of Farrous Metallurgy im I. P. Bardin) 120 copies (KL Supp 12-61, 251).

S/139/61/000/004/018/023
E021/E480

AUTHORS: Kalikhman, V.L. and Umanskiy, Ya.S.

TITLE: X-Ray measurement of total sub-microporosity and of pore size, arising during the mutual diffusion of copper and nickel

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Fizika, no.4, 1961, 140-145

TEXT: Studies were carried out on the increase in sub-microporosity during the process of mutual diffusion of copper and nickel, using the apparatus for recording low-angle reflections with a slit arrangement proposed by O.Kratky (Ref.2: Kolloid-Zeitschrift, 144, 110, 1955) with slight modifications. Samples were prepared in the following way: 10 micron thick nickel foil was annealed for 2 hours at 1000°C and placed between two sheets of 20 micron thick copper foil. The surface of the foil was electropolished and washed in acetone. The sandwich was clamped and heated in vacuo at 900°C for 15 minutes. This was sufficient for diffusion welding to take place. Diffusion treatment was carried out at 1000°C for 5 to 160 minutes and at 900°C for 15 to 240 minutes in vacuo. The samples were then radiographed. Low angle

Card 1/3

reflections were obtained from the samples before and after heating. The low angle effect was caused by imperfections of the foil surface, as shown by its increase with an increasing number of foil layers. The low angle reflections were 3 to 4 times more intense after sintering, being 2 x 10^{-3} of the intensity of the initial beam. Thus, the effect must be caused, in the main, by submicropores formed as a result of the difference in partial coefficients of diffusion of the sintered metals. Generation of pores had already started even after 15 minutes at 900°C. The minimum size of pore was about 300 A after this time. Obviously, this must have been close to the critical size for nucleation. With increasing time, the pore size increased because of coagulation of pores. The process of increase in pore size, in the initial stages, was obviously autocatalytic. The total volume of submicroscopic porosity was of the order of 10^{-3} of the volume of the sample. S.T.Konobeyevskiy is mentioned in the article. There are 4 figures and 9 references: 3 Soviet and 6 non-Soviet. The four references to English language publications read as follows: Ref.4: A. Guinier, G. Fournett. Small-angle scattering of X-rays, London, 1955.

24195

11600

S/129/61/000/007/014/016
E073/E535

AUTHORS: Astrakhantsev, S.M., Gromova, S.P., Kalikhman, V.L. and Umanskiy, Ya. S.

TITLE: Influence of Diffusion Porosity in a Nichrome Alloy on the Sintering of Nickel and Chromium Powders

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, 1961, No.7, pp.52-54

TEXT: In studying the process of sintering of nickel and chromium the authors discovered some unusual changes of the lattice period and the shape of the lines on X-ray diffraction patterns of the nichrome Kh20N80 (NiCr20). For the investigations, specimens of various densities (porosities 10-15, 25-30 and 40-45%) were prepared by cold pressing. The specimens were sintered in a hydrogen stream at 1150°C for 8 hours. X-ray diffraction patterns were made using a molybdenum reference standard with copper radiation. The lattice period was calculated from the line (420). It was found that during sintering the lattice period did not change monotonously but in jumps. Fig.1 shows the dependence of the lattice period, Å, of sintered

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nichrome on the sintering time, hours, for the following initial periods: curve 1 - 15-20%, curve 2 - 30%, curve 3 - 40-45%. During the first three hours of sintering, the maxima and minima of the lattice periods did not coincide for specimens with various porosities; however, during the later stages of sintering they are synchronous for all the specimens. There is a similar change in the blurring of the lines on the X-ray diffraction patterns: the lines are blurred or sharp right up to the division of the K_α doublet. The sharp lines correspond to larger lattice periods. Similar phenomena were observed by S. S. Gorelik (Ref.1: Nauchnyye doklady vysshey shkoly, Metallurgiya, No.2, 1959) during sintering of Cunico alloy. These phenomena indicate that sintering of nickel and chromium powders does not change monotonously the uniformity of the solid solution. This can be explained on the basis of results of the study of the formation and growth of sub-microporosities in the nichrome alloy. Porosity was observed in an alloy of a similar composition (21% Cr) during the distillation of chromium in vacuum at various temperatures. The dimensions of the sub-micropores were determined by studying the low angle scattering of X-rays. Fig.2 shows the test-rig

Influence of Diffusion Porosity ... S/129/61/000/007/014/016
E073/E535

used for studying the low angle scattering (1 - X-ray tube, 2 - monochromator, 3 - specimen, 4 - collimator, 5 - Geiger-Muller counter, 6 - counting circuit). It was found that sub-microscopic pores of a size of several hundred Angstrom form in the nichrome during the process of evaporation of chromium. Fig.3 shows the dependence of the average pore dimensions, $\bar{R}_o$, Å, and of the total porosity (loss in weight), ΔP, mg, in nichrome subjected to vacuum evaporation at various temperatures as a function of time, $\sqrt{\tau}$, min for the sintering temperatures 1200°C (plot a) and 1350°C (plot b). The dimensions of the sub-micropores also did not change monotonously; the lower the evaporation temperature the larger will be the number of extremal points on the curve $R_o = f(\sqrt{\tau})$. The observed phenomenon can be explained only by the healing of the formed sub-micropores, since the maximum dimension of the pores was considerably below 1000 Å. Healing proceeds as a result of chromium diffusion; its partial diffusion coefficient in nichrome is considerably higher than the diffusion coefficient of nickel (Ref.4: S. Dashman: "Scientific fundamentals of vacuum engineering", Russian translation, 1950).

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In this case healing is possible if the flow of chromium atoms to the pore is larger than the flow of vacancies. After the pores have healed, sections will remain which are chromium enriched and the internal flow of vacancies will cease. The appearance of concentration non-uniformities leads to blurring of the lines on the X-ray pattern and to a reduction of the lattice period. By means of low angle scattering it is also possible to detect the decrease in the pore dimensions. Then, the chromium concentration begins to equalize in the alloy and the concentration of vacancies will increase; this produces a narrowing of the lines on the Debye pattern. An increase in the concentration of the vacancies leads to the formation of new and growth of remaining pores. The concentration of vacancies will decrease in jumps and the process of healing of the pores will start afresh. This process appears to continue until a certain quantity of chromium is evaporated from the alloy. There are 3 figures and 4 references: 3 Soviet and 1 a Russian translation.

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

KALIKHMAN, V.L.; UMANSKIY, Ya.S.

Determining the orientation of the diffusion submicropores in α-brass by the method of small-angle scattering of X rays. Fiz. tver. tela 3 no.2:331-335 F '61. (MIRA 14:6)

1. Institut stali, Moskva.
(Diffusion)
(X rays—Industrial applications)

ASTRAKHANTSEV, S.M.; GROMOVA, S.P.; KALIKHMAN, V.L.; UMANSKIY, Ya.S.

Effect of the occurrence of diffusion porosity in nichrome alloys on the sintering of nickel and chromium powders. Metalloved. i term. obr. met. no.7:52-54 Jl '61. (MIRA 14:6)

1. Moskovskiy institut stali.
(Sintering)
(Nickel-chromium alloys—Metallography)

S/126/61/011/002/023/025
E073/E335

AUTHORS: Kalikhman, V.L., Umanskiy, Ya.S. and Chirikov, N.V.

TITLE: Study of the Diffusion Porosity Occurring During Distillation of Chromium From Single Crystals of the Alloy ЭИ437Б (EI437B)

PERIODICAL: Fizika metallov i metallovedeniye, 1961, Vol. 11, No. 2, pp. 314 - 316

TEXT: As shown in other work by the authors (to be published in Metallovedeniye i termicheskaya obrabotka metallov) diffusion porosity occurs during distillation of chromium from the alloy Х20Н80 (Kh20N80), whereby the pores are equally oriented within the limits of 1 grain. By means of a method described in an earlier paper (Ref. 3), the authors attempted to determine the orientation of the pores in the initial stages of their growth with respect to the crystal lattice of the alloy. Since they did not manage to grow sufficiently large crystals of the alloy Kh20N80 by recrystallisation, the authors used large crystals obtained accidentally in scrap material from the alloy EI437B, the composition of which is similar to that of

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S/126/61/011/002/023/025
E073/E335

Study of ....

Kh20N80. The single-crystal film which is required for investigating the pores by the method of small-angle X-ray scattering was obtained by mechanical grinding to a thickness of 150 μ, followed by electropolishing to a thickness of 60 μ. The electrolytic thickness-reduction did not ensure total removal of the work-hardened layer and the Laue pattern is blurred (Fig. 1 - pertaining to a single-crystal film of the alloy EI437B, the surface plane of which is near to the plane (100)).However, specimens produced from thicker sheet by electrolytic polishing were considerably nonuniform as regards thickness. The Cr distillation was effected in a quartz ampule (which was connected continuously to a pre-vacuum pump) at 1 330 °C for 2.5 hours. Shorter distillation times did not produce porosities. After terminating the distillation process, the specimen was rapidly thrown into the cooled part of the ampule to eliminate falling-out of the ordered phase. Some of the specimens crystallised during distillation and broke up into a number of small grains, whilst others remained single crystals. Curves of the drop in intensity of

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Study of ....

the small-angle scattering as a function of the distance from the edge of the primary beam were plotted by photometering the X-ray diffraction patterns which were obtained by means of slot equipment built as described by Kratky (Ref. 4). The slot was located in differing crystallographic directions. Specimens were investigated, the surfaces of which were near to the plane (111) and (100). The photometric curves were standardised in such a way that the intensities at a distance of 1' from the edge of the primary beam were equal for all the X-ray diffraction patterns taken from the same specimen. Following that, lines of equal intensity were plotted in the polar coordinates (angles-intensity). The thus obtained graphs are plotted in Figs. 2a and b (curves of equal intensity of low-angle scattering in various directions: Fig 2a. - specimen surface near to the plane (111), 1, 2, 3, ...8 min; Fig. 2b - specimen surface near to the plane (100), 1, 2, 3, ...6 min). It can be seen that the intensity of low-angle scattering of X-rays drops more slowly for a specimen, the surface plane of which is near to the plane (111) if the

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Study of ....

slot is in the direction [211] (corresponding to the photometering direction [110]). This means that in the direction [110] the dimension of the pore nucleus is at a minimum (Ref. 3). The anisotropy of the drop in intensity for specimens with the surface plane near to the plane (100) confirms these conclusions. It is pointed out that the anisotropy of low-angle scattering for the alloy EI437B is not as pronounced as it is for brass. This is attributed to the fact that the alloy is strongly contaminated with nonmetallic inclusions with irregular boundaries, which can be clearly seen in unetched polished cuts. They can serve as a basis for forming arbitrarily oriented pores.
There are 2 figures and 4 Soviet references.

ASSOCIATION: Moskovskiy institut stali im. I.V. Stalina
(Moscow Institute of Steel im. I.V. Stalin)

SUBMITTED: September 8, 1960

KALIKHMAN, V.L.; UMANSKIY, Ya.S.

Radioscopic measurement of the general submicroporosity and of the size of pores forming in the mutual diffusion of copper and nickel. Izv.vys.ucheb.zav.; fiz. no.4:140-145 '61.
(MIRA 14:10)

1. Moskovskiy institut stali imeni I.V.Stalina.
(Radiography) (Porous materials)

KALIKHMAN, V.L.; UMANSKIY, Ya.S.

Application of the method of small-angle scattering of x rays in the study of submicroscopic inhomogeneities in materials; survey. Zav.lab. 27 no.6:691-698 '61. (MIRA 14:6)

(X rays--Industrial applications)
(Materials--Testing)

S/659/62/008/000/018/028
I048/I248

AUTHORS: Kalikhman, V.L., Umanskiy, Ya.S., and Chirikov, N.V.

TITLE: A study of the appearance and growth of diffusion porosity during the evaporation of the volatile component from some nickel-based alloys

SOURCE: Akademiya nauk SSSR. Institut metallurgii, Issledovaniya po zharoprochnym splavam. v.8. 1962. 127-131

TEXT: Equations for calculating the size and amount of submicro diffusion pores in metals and alloys from small-angle x-ray scattering data are derived. These equations were used to calculate the diffusion porosity of Ni-26.9% Mn and Ni - 27.6% Zn alloys. The alloy specimens (foil 30 microns thick) were heated in vacuo to 800-1100°C to evaporate the more volatile component. The pore size increased at first with increasing time at the elevated temperature, reached a maximum and decreased thereafter. The pores could be classified into two groups according to size; the maximum sizes are 400 angstrom in the first and 1500 angstrom in the second group.

Card 1/2

S/659/62/008/000/018/028
I048/I248

A study of the appearance and growth...

It is assumed that the growth of the pores is an autocatalytic process during the first stages of evaporation; the rate of growth decreases with time during to the exhaustion of the vacancy sources within the alloy. The fraction of diffusion porosity in the total porosity amounts to 18-20% in the specimens subjected to evaporation at 800°C and decreases with both time and increasing temperature. There are 4 figures.

Card 2/2

ACCESSION NR: AP4044140 S/0129/64/000/008/0041/0044

AUTHOR: Al'tman, A. B.; Gusev, V. Ya.; Kalikhman, V. L.; Umanskiy, Ya. S.

TITLE: Investigation of magnetosolid Mn-Al cast alloys

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 8, 1964, 41-44

TOPIC TAGS: manganese aluminum alloy, aluminum containing alloy, alloy magnetization, cast alloy, permanent magnet, magnetic alloy, magnetic permeability

ABSTRACT: 30 x 10 x 10 mm and 50 x 15 x 15 mm rectangular and 6 x 20 mm cylindrical samples of an Mn - Al alloy containing 67.2-73.5% Mn were investigated using magnetic, x-ray and metallographic methods in an attempt to evaluate the ferromagnetic properties and possible use of alloys of this type in permanent magnets. The magnetic properties of the samples, premagnetized in a 10,000 e electromagnetic field, were measured on a regular ballistic testing device. X-ray pictures were taken in an 86-mm Debye chamber with chromium and iron emission. The microstructure of unetched and etched cross sections was studied with an optical microscope. All the magnetic samples were found to contain an α-phase with a tetragonal, ordered, space-centered structure with a- and c-periods of 2.77 and 3.57 kX, respectively. The phase composition was found to depend on alloy chemical composition, cooling rate and the mode of thermal treatment. An alloy, tempered at 400-500C for

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ACCESSION NR: AP4044140

less than 1 hr., was found to consist almost entirely of a ferromagnetic τ-phase. Most of the tested alloy samples showed magnetic properties immediately after casting, with H_c values ranging from 180 to 960 e in individual samples. The magnetic state was intensified by a hardening procedure in which samples, annealed at 1150-1180C in hydrogen for 0.5-1 hr., were cooled at a critical rate or quenched in oil or cold water and tempered at 450-600C. The principal magnetic data for thermally treated Mn-Al cast magnets are shown in the Enclosure. "I. M. Garina, Ye. Yu. Zel'tser, T. N. Korchebokova, G. I. Lasis and V. N. Sorokina participated in the tests." Orig. art. has: 4 figures and 1 table.

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys); VNIIEM

SUBMITTED: 00 ENCLOSURE: 01 SUB CODE: MM, EM

NO REF SOV: 000 OTHER: 000

Card 2/3

Card/3

GONCHAROV, S.P.; KOROTKOV, G.P.; KALIKHOVICH, V.N.; SALENKO, S.V., inzhener, redaktor; VERINA, G.P., tekhnicheskiy redaktor.

[Automatic control in railroad water supply pumping stations] Avtomaticheskoe upravlenie nasosnymi stantsiiami zheleznodorozhnogo vodosnabzheniia. Moskva, Gos.transportnoe zhel-dor. izd-vo, 1955. 157p. (Vsesoiuznyi nauchno-issledovatel'skii institut zheleznodorozhnogo transporta. Trudy, no.106) (MLRA 9:2)
(Pumping stations) (Railroads--Water supply) (Automatic control)

KALIKHOVICH, V.N., inzh.; KOROTKOV, G.P., inzh.

Automatic pumping station for railroad water supply. Zhel. dor. transp. 40 no.1:54-56 Ja '58. (MIRA 11:1)
(Railroads--Water supply)
(Pumping stations)

KALIKHOVICH, Viktor Nikolayevich; MIKHNENKO, Ye.F., kand. tekhn. nauk, retsenzent; ZUBLEVSKIY, S.M., inzh., red.; DROZDOVA, N.D., tekhn. red.

[Traction gearing of electric locomotives] Tiagovye zubchatye peredachi elektricheskikh lokomotivov. Moskva, Transzheldorizdat, 1963. 67 p. (MIRA 16:10)
(Electric locomotives--Transmission devices)

KALININ, Vladimir Konstantinovich, kand. tekhn. nauk; MIKHAYLOV, Nikolay Mikhaylovich, kand. tekhn. nauk; DURANDIN, G.B., inzh., retsenzent; ROGOVA, Ye.N., inzh., retsenzent; KRASKOVSKAYA, S.N., inzh., retsenzent; DUBROVSKIY, Z.M., inzh., retsenzent; KALIKHOVICH, V.N., inzh., retsenzent; RAKOV, V.A., red.

[Rolling stock of electric railroads] Elektro-podvizhnoi sostav zheleznykh dorog. Izd.2., perer. Moskva, Transport, 1964. 498 p. (MIRA 18:1)

KALIKHOVSKIY, V.L., inzh.

Group machining of bearing covers and housings. Trakt.i sel'khozmash. 32 no.9:40-42 S '62. (MIRA 15:12)

1. Khersonskiy kombaynovyy zavod.
(Bearings (Machinery))

p. 75

S/176/63/000/002/002/052
A052/A126

AUTHOR: Kalikhovskiy, V.L.

TITLE: Grouped machining of bearing housings and caps

PERIODICAL: Referativnyy zhurnal, Tekhnologiya mashinostroyeniya, no. 2, 1963, 8, abstract 2B27 (Traktory i sel'khozmashiny, no. 9, 1962, 40-42)

TEXT: The results of grouped machining as employed at the Kherson combine plant for the bearing-assembly elements of combines are discussed. The housing group includes six denominations of parts machined on a turret lathe in a pneumatic group appliance using a combined cutting tool. The through cap group consists of 10 denominations of parts. According to the operational schedule the caps are machined on a drilling machine and a lathe and then again on a drilling machine. Technological processes applied to both groups are briefly described and diagrams of fixtures and appliances are presented. As a result of employed grouped machining methods the labor input has been cut (in the case of housings for instance by 29.8%) and greater economy has been achieved. There are 5 figures.

Card 1/2

Grouped machining of...

S/176/63/000/002/002/052
A052/A126

L. Tsukerman

(Abstracter's note: Complete translation.)

Card 2/2

KALIKIN, A.A., inzh.; MAZUR, Ye.M., inzh.

Open gas-distributing stations. Stroi. truboprov. 7 no.7:15 Jl '62. (MIRA 15:7)

1. Trest Ukrgazneftestroy, Kiyev.
(Gas distribution)
(Pipelines—Buildings and structures)

KALIKIN, B.

Epizootiology of listerioses. Higijena, Beogr. 12 no.4:423-435 '60.
(LISTERIA INFECTIONS transm)

KALIKIN, Dr. Bous

"Acid Prophylaxis and Acid Therapy of Pasteurellosis". Dr. Bous Kalikin - higher scientific co-operator of Min. of Agric. of Republic of Serbia, Mbr. of Vet. Inst. for scientific research of Serbia, Beograd.

SOURCE: Vet. BROJ 1-2, p. 20, 1951

DAVYDOV, Il'ya Borisovich; KALIKIN, Nikolay Fedorovich; LYASHKO, Igor' Nikolayevich; POSTERNYAK, Ye.F., inzh., red.; FREGER, D.P., red.izd-va; GVIRTS, V.L., tekhn. red.

[General overhaul of a KR-450 jig-boring machine]Opyt kapital'nogo remonta koordinatno-rastochnogo stanka modeli KR-450. Leningrad, 1962. 31 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Mekhanicheskaia obrabotka metallov, no.28) (MIRA 16:3)
(Drilling and boring machinery--Maintenance and repair)

KALIKINSKIY, A. A.

1. VIL'DFLUSH, R. T.; BRAGIN, A. M.; KALIKINSKIY, A. A.; KOROBOVA, G. Ya.

2. USSR (600)

4. Soils--White Russia

7. Effectiveness of granular superhosphate then drilled into seed rows on loamy soils of the White Russian S. S. R. Sov. agron. 11 no. 1 1953.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

KALIKINSKIY, A.A., dots., otv. za vyp.

[Abstracts of the reports of the Student Scientific Conference on Work Results for 1961] Tezisy dokladov Studencheskoi nauchnoi konferentsii po itogam raboty za 1961 god, 1962. Gorki, Belorusskaia sel'khoz. akad., 1962. 65 p. (MIRA 16:11)

1. Studencheskaya nauchnaya konferentsiya po itogam raboty za 1961 god, 1962.
(Agriculture)

GORSHKOV, V.; RUBAN, T.; MONAKHOV, A.; KALIKINSKIY, V.; KAPRALOV, M.

New machines in operation. Den. i kred. 21 no.3:51-57 Mr '63. (MIRA 16:3)

1. Glavnyy bukhgalter Belgorodskoy oblastnoy kontory Gosbanka (for Gorshkov). 2. Starshiy inspektor glavnoy bukhgalterii Belgorodskoy oblastnoy kontory Gosbanka (for Ruban). 3. Starshiy ekonomist glavnoy bukhgalterii Kalininskoy oblastnoy kontory Gosbanka (for Monakhov). 4. Glavnyy bukhgalter upravleniya filialami Gosbanka TSelinogradskoy oblasti (for Kalikinskiy). 5. Starshiy mekhanik Tul'skoy oblastnoy kontory Gosbanka (for Kapralov).

(Banks and banking--Accounting) (Machine accounting)

KALIKINSKIY, Yu.

Training of the technical ear. Prof.-tekh.obr. 19, no.4:17-19 Ap '62. (MIRA 15:4)

(Vocational education)

KALIKINSKIY, Yu.A.

Some characteristics of hearing in specialists in the auditory detection of flaws in internal combustion engines. Vop. psikhol. 7 no.5:121-134 S-O '61. (MIRA 15:1)

1. Institut psikhologii Akademii pedagogicheskikh nauk RSFSR, Moskva.

(HEARING) (GAS AND OIL ENGINES--TESTING)

SARATIKOV, A.S.; MARINA, T.F.; KALIKO, I.M.

Stimulating effect of roseroot on the higher sections of the brain. Izv. SO AN SSSR no.8. Ser. biol.-med. nauk no.2:120-125 '65. (MIRA 18:9)

1. Tomskiy meditsinskiy institut.

KALIKOŸ I. M.

Kalilo, I. M. — "A complex pathogenetic physical therapy of a hypertonic disease," Sbornik trudov (Tomskiy obl. nauch.-issled. in-t fiz. ne odov lecheniya i kurortologii), Vol. VI, 1949, p. 21-33

SO: u-5241, 17 December 1953, (Letopis 'zhurnal 'nykh Statey, No. 26, 1949).

KALIKO, I. M.

USSR/Human and Animal Physiology. Circulation T-5

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65289

Author : I.M. Kaliko
Inst : Tomsk Medical Institute, Tomsk Scientific Research Institute of Health Resorts and Physiotherapy
Title : An Investigation of Higher Nervous Activity During Physiotherapy for Hypertensive Disease.

Orig Pub : Sb. tr. Tomskiy n.-i. in-t kurortol. i fizioterapii. Tomskiy Med. in-t, 1956, (1957), 9, 91-100.

Abstract : In the neurogenic stage of hypertensive disease disturbances in the lability of nervous processes or weakening of the inhibitory process was frequently noted. A predominance of inhibition was observed in cases representing a transitional stage of hypertension. In the neurogenic stage a zero plethismogram was obtained with difficulty; vascular reactions to conditioned and unconditioned stimuli were prolonged, intensive, frequently distorted, and had short latent periods.

Card : 1/2

L 2109-66

ACCESSION NR: AP5024176 UR/0290/65/000/002/0120/0125
615.324:615.739

AUTHOR: Saratikov, A. S.; Marina, T. F.; Kaliko, I. M.

TITLE: Stimulant effect of Rhodiola rosea on higher brain centers

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya biologo-meditsinskikh nauk, no. 2, 1965, 120-125

TOPIC TAGS: pharmacognosy, experimental animal, nervous system drug, drug effect, cerebral cortex, electroencephalography, psychophysiology, bodily fatigue

ABSTRACT: The stimulant effect of Rhodiola rosea (golden root) was investigated in rabbits by the electroencephalographic method, and in healthy and neurotic persons using a speech-motor method. In the experiments with rabbits, EEG's were recorded prior to spinal administration of 0.05, 0.2, and 1 ml/kg doses of Rhodiola rosea root extract, 45 min later, during sciatic nerve stimulation, and during rhythmic light flashes. In additional experiments, the effect of the root extract was investigated after intravenous administration of CNS depressants (chloral hydrate, 75 mg/kg; medinal, 100 mg/kg; and aminazine, 5 mg/kg). Bioelectric activity of the sensory-motor and occipital areas of the cortex was recorded on a 4-channel electro-

Card 1/3

L 2109-66
ACCESSION NR: AP5024176

encephalograph using implanted bipolar electrodes. In a second group of experiments, 35 healthy persons and 45 neurotic patients aged 21 to 52 yr were given single doses (10 drops) of the extract or 3 doses a day for 10 days. Cortical excitation and inhibition were determined by the latent period between question and response, nature of the response, negative reactions or persistent reactions, and nature of motor responses. In rabbit EEG's, the effect of the root extract is expressed in the form of alternating periods of spontaneous, low voltage, synchronized rhythm and "rest" rhythm. These EEG changes last for 30—75 min and are more pronounced with the 0.2 and 1 ml/kg doses. The root extract does not eliminate the depressant effect of chloral hydrate, medinal, and aminazine, but does reduce the intensity of their effects and promotes faster EEG normalization. The extract has a considerably more antagonistic effect toward chloral hydrate and medinal than toward aminazine. In healthy persons, a single dose of the extract produced no changes. In neurotic persons, however, a single dose reduces the speech latent period by 1 to 3 sec and eliminates stereotype responses and negative reactions. This favorable effect is of brief duration; by the end of the third day the higher nervous activity of the patients had returned to the initial pathological state. After the 10 day treatment, the neurotic patients were all considerably improved, with a reduced latent period, higher power of concentration, and more meaningful responses [duration of favorable effects is not given]. Rhodiola rosea extract primarily intensifies cortex excitation processes and normalizes patho-

Card 2/3

L 2109-66

ACCESSION NR: AP5024176

logically changed higher nervous activity of neurotic persons. Orig. art. has: 3 figures. [06]

ASSOCIATION: Tomskiy meditsinskiy institut (Tomsk Medical Institute)

SUBMITTED: 08Mar65 ENCL: 00 SUB CODE: LS

NO REF SOV: 001 OTHER: 005 ATD PRESS: 4113

Card 3/3

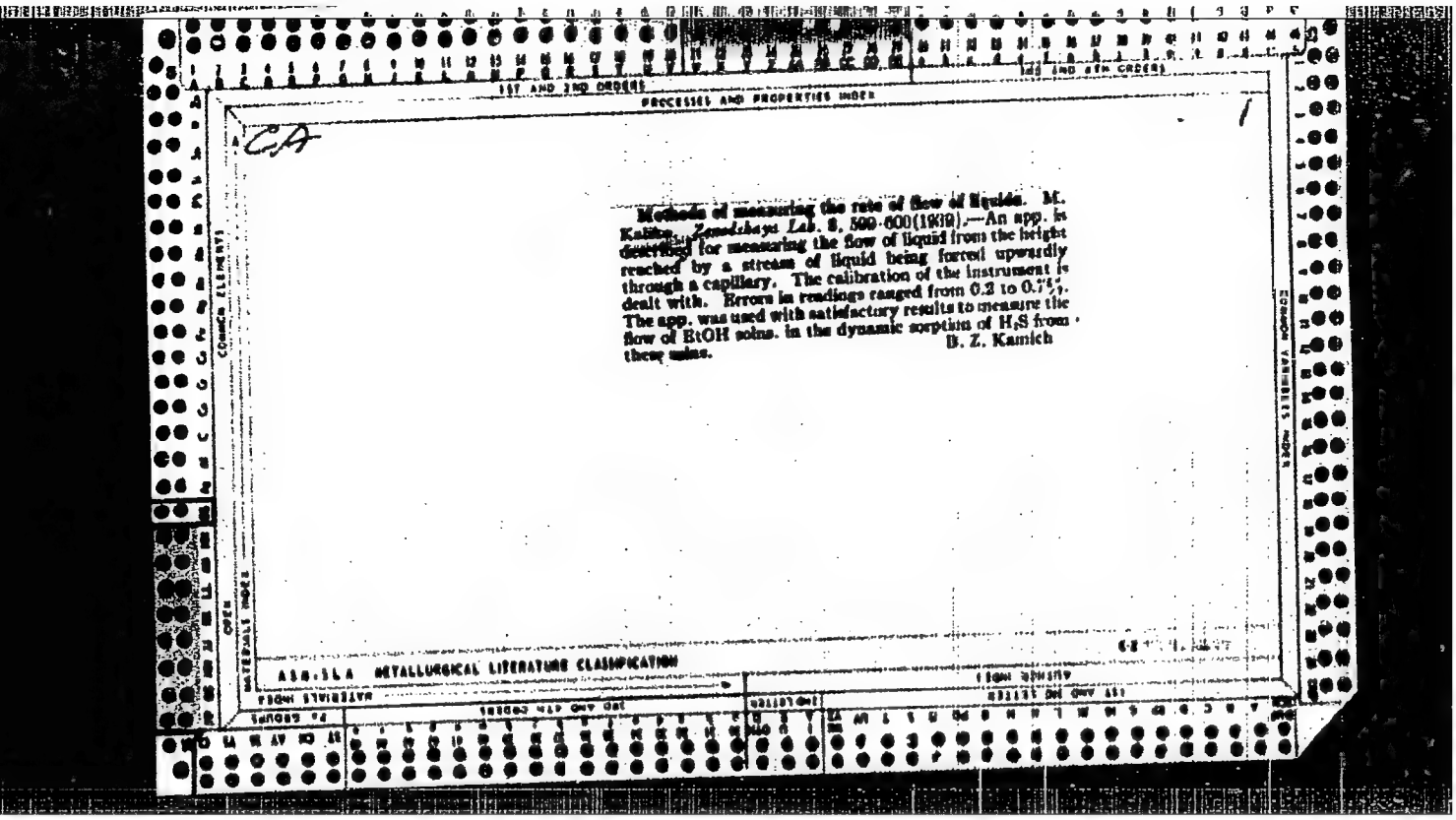
KALIKO, I.M.; BURNASHOV, I.G.

Method of induction thermophoresis. Vop.kur., fizioter. i lech. fiz. kul't. 28 no.2:175-176 Mr-Ap'63. (MIRA 16:9)

1. Iz Tomskogo instituta kurortologii i fizioterapii (dir.-kand.med nauk Ye.G.Chulkov)
(ELECTROTHERAPEUTICS)

KAMIKO, L.I., inzh.

Improving the equipment of plants producing gypsum concrete partitions.
St.ol.mat. 10 no.8:34 Ag '64. (MIRA 17:12)



PROCESSES AND PROPERTIES INDEX

CA

1

Methods of measuring the rate of flow of liquids. M. Kalika. *Zavodskaya Lab.* 8, 599-600(1939).—An app. is described for measuring the flow of liquid from the height reached by a stream of liquid being forced upwardly through a capillary. The calibration of the instrument is dealt with. Errors in readings ranged from 0.2 to 0.7%. The app. was used with satisfactory results to measure the flow of EtOH solns. in the dynamic sorption of H_2S from these solns.

B. Z. Kamich

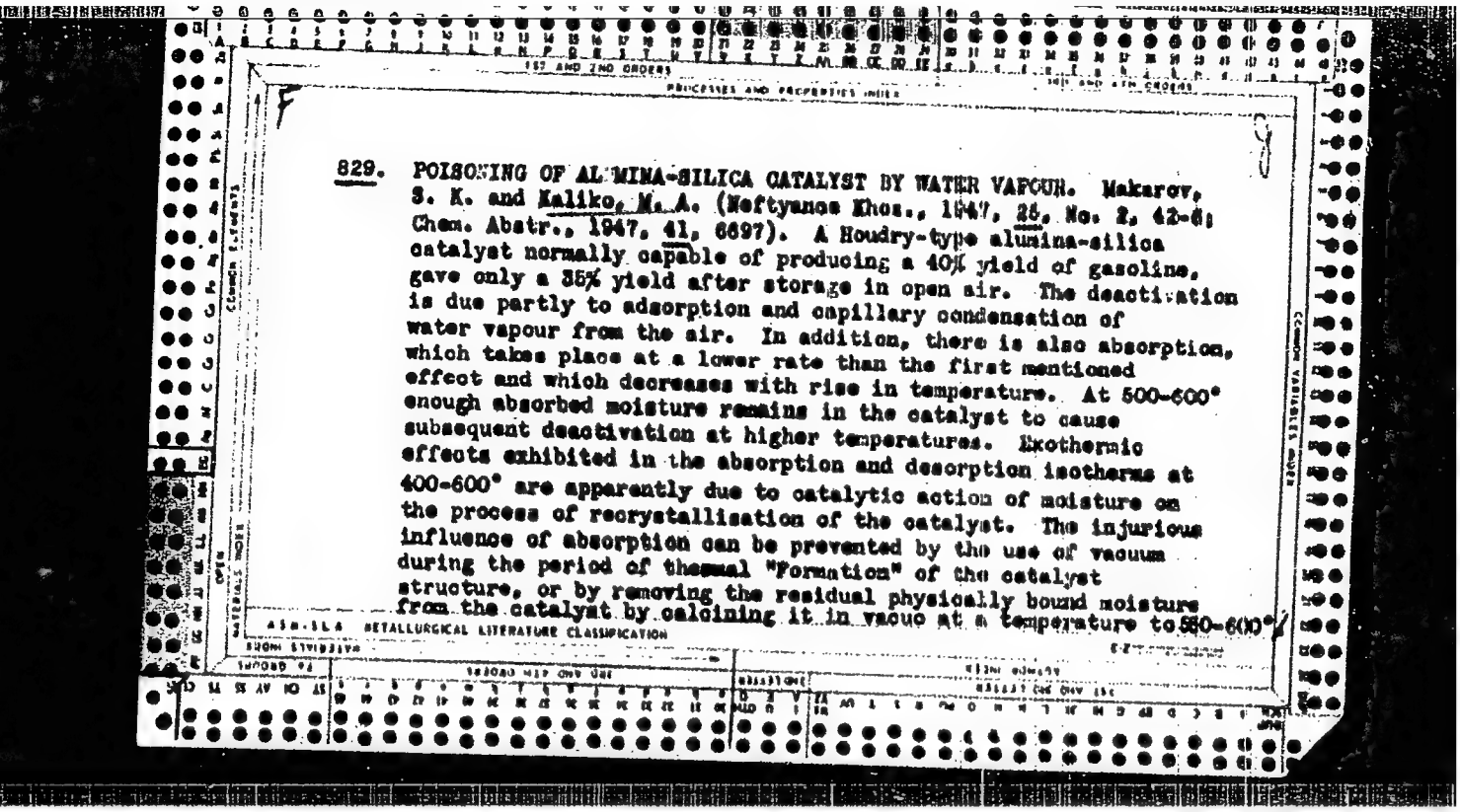
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

22

Poisoning of alumina-silica catalyst by water vapor. S. K. Makarov and M. A. Kaliku. *Neftyanoe Khoz.* 25, No. 2, 42-6(1947).—A Houdry-type alumina-silica catalyst normally capable of producing a 40% yield of gasoline, gave only a 35% yield after storage in open air. The deactivation is due partly to adsorption and capillary condensation of water vapor from the air. In addn., there is also absorption, which takes place at a lower rate than the first-mentioned effect and which decreases with rise in temp. At 500-600° enough absorbed moisture remains in the catalyst to cause subsequent deactivation at higher temps. Exothermic effects exhibited in the absorption and desorption isotherms at 100-600° are apparently due to catalytic action of moisture on the process of recrystn. of the catalyst. The injurious influence of absorption can be prevented by the use of vacuum during the period of thermal "formation" of the catalyst structure, or by removing the residual physically bound moisture from the catalyst by calcining it *in vacuo* at a temp. up to 550-600°. Bruno C. Metzner

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

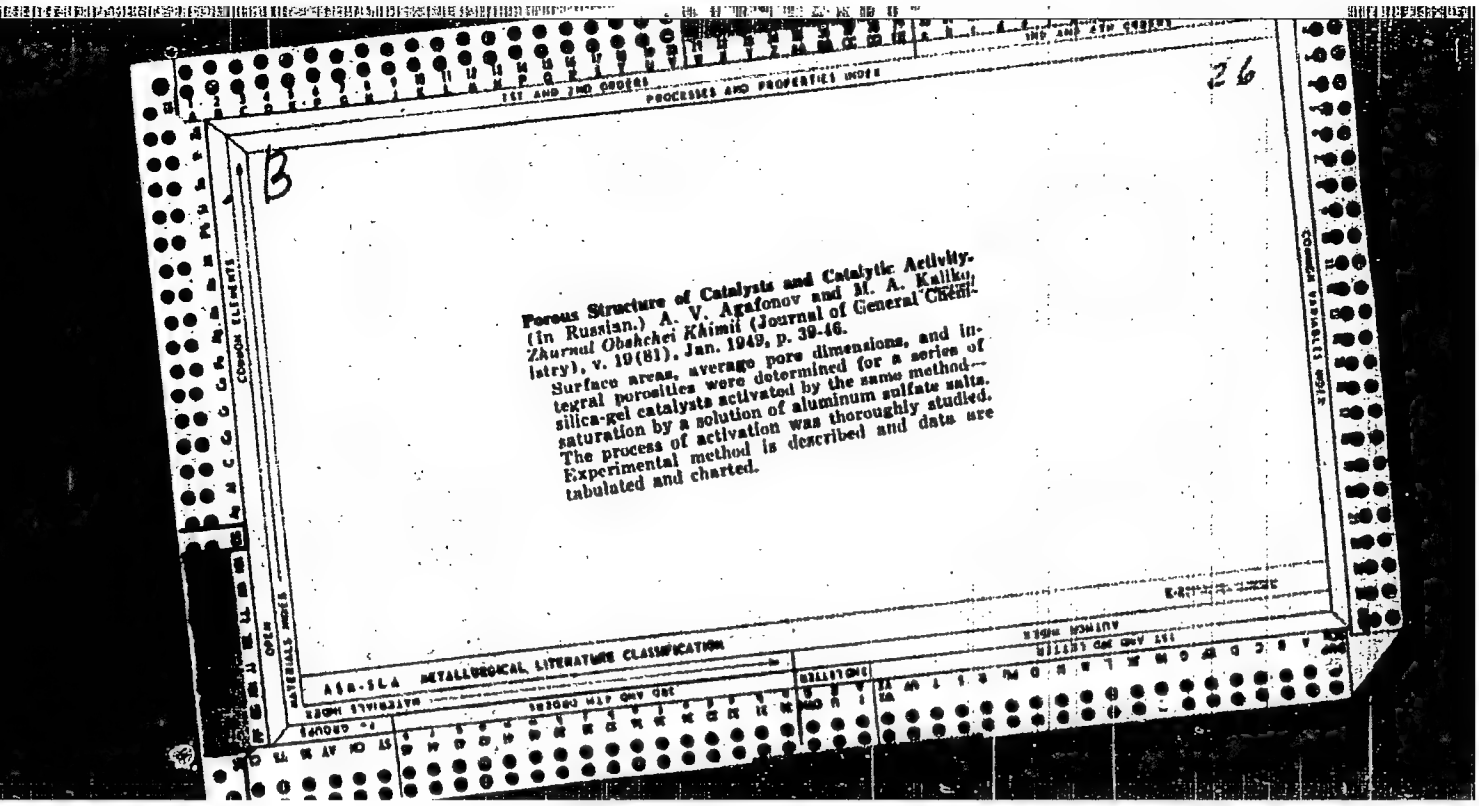


829. POISONING OF ALUMINA-SILICA CATALYST BY WATER VAPOUR. Makarov, S. K. and Kaliko, M. A. (Neftyanoe Khoz., 1947, 25, No. 2, 42-6; Chem. Abstr., 1947, 41, 6697). A Houdry-type alumina-silica catalyst normally capable of producing a 40% yield of gasoline, gave only a 35% yield after storage in open air. The deactivation is due partly to adsorption and capillary condensation of water vapour from the air. In addition, there is also absorption, which takes place at a lower rate than the first mentioned effect and which decreases with rise in temperature. At 500-600° enough absorbed moisture remains in the catalyst to cause subsequent deactivation at higher temperatures. Exothermic effects exhibited in the absorption and desorption isotherms at 400-600° are apparently due to catalytic action of moisture on the process of recrystallisation of the catalyst. The injurious influence of absorption can be prevented by the use of vacuum during the period of thermal "formation" of the catalyst structure, or by removing the residual physically bound moisture from the catalyst by calcining it in vacuo at a temperature to 550-600°.

KALIKO, M. A.

"Porous Structure of Catalysts and Effect upon Catalytic Activity."
Agafonov, and Kaliko. (p. 33.)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1949, Volume 19, No.1



Porous Structure of Catalysts and Catalytic Activity. (In Russian.) A. V. Agafonov and M. A. Kaliko, *Zhurnal Obshchei Khimii* (Journal of General Chemistry), v. 19(81), Jan. 1949, p. 39-46.

Surface areas, average pore dimensions, and integral porosities were determined for a series of silica-gel catalysts activated by the same method—saturation by a solution of aluminum sulfate salts. The process of activation was thoroughly studied. Experimental method is described and data are tabulated and charted.

KALIKO, M. A., TOPCHIYEVA, K. V., PIGUZOVA, L. I., AGAFONOV, A. V., PACHENKOV, G. M., KAMAKIN, N. M., MIRSKIY, Y. S.

"Studying the Nature of Activity of Alumosilicate Catalysts."

Report submitted at the Fifth World Petroleum Congress, 30 May - 5 June 1959. New York.

KALIKO, M.A.; PERVUSHINA, M.N.

Studying character of the surface of cracking catalysts by the method of adsorption of cesium cations tagged with radioactive cesium. Khim. i tekh.topl. i masel 4 no.1:35-40 Ja '59. (MIRA 12:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti.
(Catalysts) (Adsorption) (Cesium)

5(4) SOV/76-33-4-26/32

AUTHORS: Kaliko, M. A., Nikitin, Yu. S., Fedotova, T. V.

TITLE: The Effect of the Conditions of Preparation of Hydrogels of Silicon- and Aluminum Oxide Upon the Structure and Activity of Mixed Aluminosilicate Catalysts (Vliyaniye usloviy prigotovleniya gidrogeley okisi kremniya i okisi alyuminiya na strukturu i aktivnost' smeshannykh alyumosilikatnykh katalizatorov)

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 4, pp 922-929 (USSR)

ABSTRACT: As is known, (Refs 8, 9) the porous structure of silicagels (SG) and aluminum gels (AG) strongly depends on the production technique. It can be expected that with equal content of (AG) the catalysts (C) prepared with hydrogels of different production differ from one another with respect to their properties. In the present case 4 (SG)-types were prepared, differing as to the concentration of the acids used in production and in the preparation conditions - SG-1 (4.36 n H_2SO_4), SG-2 (2.37 n H_2SO_4) SG-10 (1.1 n H_2SO_4), S-25 (0.6 n HCl). The (AG) A-1 and A-2 were precipitated at a lower temperature (8-10°) than A-3 (100°).

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The Effect of the Conditions of Preparation of Hydrogels of Silicon- and Aluminum Oxide Upon the Structure and Activity of Mixed Aluminosilicate Catalysts

Aluminum silicagel catalysts (AC) were prepared by intermixing the humid (SG) and (AG) and by after-treating and annealing the tablets at 750° during 3 hours. The (SG) strongly differed in their structure (Fig 1 adsorption isotherm of CH_3OH, table 1, structural values). SG-1 is homogeneously fine-porous, SG-2 likewise, although it exhibits larger pores, S-25 and SG-10 are less homogeneous (they were precipitated at a higher pH). The structural properties of AG were likewise determined from methanol adsorption isotherms (Fig 2)(Table 1). A-3 possesses a considerably larger pore volume than A-1 and A-2. By intermixing the different (AG) and (SG) the authors obtained the (AC) having a constant composition (30% Al_2O_3 - 70% SiO_2) and the structural characteristics (Table 2) were determined from the adsorption isotherms of methanol (Fig 3). The catalytic activity of (AC) was evaluated after the cracking of the kerosene-gasoline fraction of an Artem-Malgobek petroleum at determined conditions (Table 3, results of cracking with the 6 various (AC)-types). The experimental results obtained show that in a certain respect the structural properties of the intermixed gels are preserved in the catalyst, in which con-

The Effect of the Conditions of Preparation of Hydrogels of Silicon- and Aluminum Oxide Upon the Structure and Activity of Mixed Aluminosilicate Catalysts

nection the fine-porous (C) exhibit the greatest efficiency and the (C) prepared from coarse-porous gels exhibit the least activity. The structural formation of the gels depends on the preparation conditions and may be considered in the same way as the growing of crystals, which also explains various observations made. Thus an enlargement of the specific surface of the coarse porous (C) may be explained by a mutual stabilization of SiO_2 and Al_2O_3 particles in the process of drying and annealing, i.e. an enlargement of the particles is prevented. The catalytic activity may also be determined by the properties of the hydrogels. There are 3 figures, 3 tables, and 16 references, 11 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza (All-Union Scientific Research Institute for Petroleum Refining and Gas Processing)

SUBMITTED: October 3, 1957

5.3620

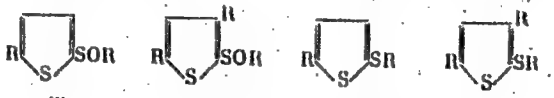
78301
SOV/79-30-3-55/69

AUTHORS: Gol'dfarb, Ya. L., Kalik, M. A., Kirmalova, M. L.

TITLE: Synthesis and Conversions of Sulfides in Thiophene Series. III. Preparation and Cleavage of Sulfoxides

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3, pp 1012-1020 (USSR)

ABSTRACT: A series of compounds of (I) and (II) types were obtained for the first time by the oxidation of the corresponding sulfoxides (III and IV) with 30% H_2O_2 in glacial acetic acid at room temperature.



(I) (II) (III) (IV)

a) R=CH$_3$, b) R=C$_2$H$_5$.

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Synthesis and Conversions of Sulfides in Thiophene Series. III. Preparation and Cleavage of Sulfoxides

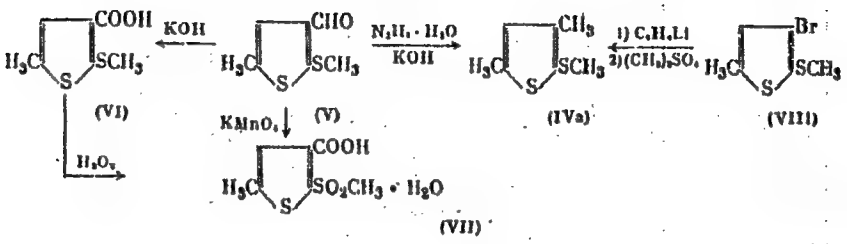
78301
SOV/79-30-3-55/69

Synthesis of compounds of types (I) and (II) was undertaken in order to study the bond cleavage between the alkylmercapto group and thiophene ring in (I) and (II) by the action of n-butyllithium at low temperature. Sulfoxides of type (III) were synthesized by authors previously (ZhOKh, 29, 2034, 1959). Compounds of type (IV) were obtained for the first time by the reduction of 2-ethylmercapto-5-ethyl-3-acetothienone and 2-methylmercapto-5-methyl-3-thiophene aldehyde (V) according to the Kishner method (modified by Huang-Milon, J. Am. Chem. Soc., 71, 3301, 1949). (V) was obtained from methyl 5-methyl-2-thienyl sulfide by the action of N-methylformanilide in the presence of phosphoryl chloride. Structure of (V) is proved by its conversion, under the conditions of Cannizazzaro reaction, into (VI). Oxidation of (V) with potassium permanganate yields (VII). (IVa) can be also obtained by the action of n-butyllithium on (VIII), followed by treatment with dimethyl sulfate.

Card 2/6

Synthesis and Conversions of Sulfides in Thiophene Series. III. Preparation and Cleavage of Sulfoxides

78301
SOV/79-30-3-55/69

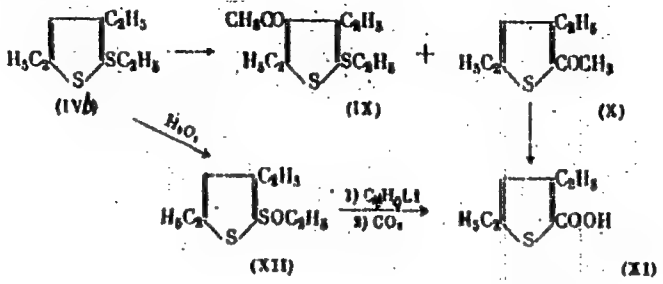


A mixture of (IX) and (X) was obtained by acetylation of (IVb) with acetyl chloride.

Card 3/6

Synthesis and Conversions of Sulfides in Thiophene Series. III. Preparation and Cleavage of Sulfoxides

78301
SOV/79-30-3-55/69



Structure of (X) was proved by oxidation to (XI), which can also be obtained from (XII). It was found that the outer sulfur atom of alkyl alkylthienyl sulfoxides is eliminated by the action of n-butyllithium at low temperatures. The thiophene ring remains unchanged. The following compounds are listed. 2-Methylmercapto-5-methyl-3-thiophenealdehyde (V), obtained (71.2%) as described above, had bp 120-122° (2 mm), n_D^{20} 1.6291.

Card 4/6

(VII) was obtained by oxidation of (V), mp 161°. 2-Methylmercapto-5-methyl-3-thiophenecarboxylic acid (VI) was obtained from (V) by the action of KOH, mp 193-193.5°. Methyl 3,5-dimethyl-2-thienyl sulfide (IVa) was obtained (78%) as mentioned above, bp 98° (14 mm), n_D^{20} 1.5662. Ethyl 3,5-diethyl-2-thienyl sulfide (IVb) was obtained (53%) from 2-ethylmercapto-5-ethyl-3-acetothienone, bp 123-123.5° (10 mm), n_D^{20} 1.5445. 3,5-Diethyl-2-thiophenecarboxylic acid was obtained by oxidation of (X), mp 85-85.5°. Ethyl 5-ethyl-2-thienyl sulfoxide (Ib) was obtained (78%) by oxidation of ethyl 5-ethyl-2-thienyl sulfide, bp 134-135° (2 mm), n_D^{20} 1.5638. Methyl 5-methyl-2-thienyl sulfoxide (Ia) was obtained (72%) by oxidation of methyl 5-methyl-2-thienyl sulfide, n_D^{20} 1.5852.

Methyl 3,5-dimethyl-2-thienyl sulfoxide (IIa), obtained as previously, had n_D^{20} 1.5600. There are 19 references, 13 U.S., 3 German, 3 Soviet. The 5 most recent U.S. references are: H. Gilman, J. J. Dietrich, J. Org.

Synthesis and Conversions of Sulfides in Thiophene Series. III. Preparation and Cleavage of Sulfoxides

78301
SOV/79-30-3-55/69

Chem., 22, 851 (1957); H. Gilman, D. R. Swayampati, J. Am. Chem. Soc., 77, 3387 (1955); H. Gilman, S. H. Eidt, J. Am. Chem. Soc., 78, 3848 (1956); C. Karr, Analyt. Chem., 26, 528 (1954); H. Gilman, D. R. Swayampati, J. Org. Ch. 21, 1278 (1956).

ASSOCIATION: Institute of Organic Chemistry Academy of Sciences USSR (Institut organicheskoy khimii Akademii nauk SSSR)

SUBMITTED: April 25, 1959

Card 6/6

35407

S/076/62/036/003/005/011
B101/B108

5.1190

AUTHORS: Nikitin, Yu. S., and Kaliko, M. A. (Moscow)

TITLE: Influence of the chemical composition on the structure, stability, and catalytic properties of mixed alumino-silicate catalysts

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 3, 1962, 533 - 539

TEXT: By mixing moist C-25 (S-25) hydrogel of SiO_2 and A-2 (A-2) hydrogel of Al_2O_3 catalysts with varying contents of Al_2O_3 were prepared (methods see Zh. fiz. khimii, 33, 922, 1959). The samples were calcined at 750°C, treated with water vapor at that temperature for 6 hrs, and their catalytic action tested before and after the treatment with water vapor by cracking a gas oil fraction. The following data are given:

Card 1/4

Influence of the ...

Structural characteristics of mixed aluminosilicate catalysts

sample	I	A				B			
		II	III	IV	V	II	III	IV	V
SiO_2	0	310	220	0.75	84	-	-	-	-
CK-8 (SK-8)	17	395	300	0.59	40	300	210	0.58	78
CK-20(SK-20)	30	440	310	0.83	66	280	230	0.76	84
CK-5 (SK-5)	40	415	335	0.60	44	225	190	0.46	52
CK-4 (SK-4)	50	415	280	0.61	52	280	170	0.48	52
Al_2O_3	100	305	165	0.47	76	-	-	-	-

Legend: I- Al_2O_3 content in % by weight; A- calcined at 750°C; B- after treatment with steam at 750°C; II- specific surface s of the skeleton, in m^2/g; III- specific surface s' of the film, in m^2/g; IV- volume of voids, in cm^3/g; V- predominant diameter d of voids, in Å.

Card 2/4

Influence of the ...

Catalytic action of mixed aluminosilicate catalysts

sample	A				B			
	I	II	III	IV	I	II	III	IV
SK-8	27.1	9.5	36.6	230	25.3	2.8	28.1	200
SK-20	28.7	11.6	40.3	240	25.0	7.0	32.0	155
SK-5	30.6	17.4	48.0	285	33.7	11.1	44.8	155
SK-4	27.2	15.5	42.7	260	33.4	8.5	41.9	185

Legend: A- calcined at 750°C; B-after treatment with steam at 750°C; I- gasoline yield, in % by weight; II- gas yield, in % by weight; III- degree of conversion, in % by weight; IV- surface area per unit volume, in m^2/cm^3.

Conclusions: (a) the specific surface of the mixed catalysts is greater than the specific surface of silicagel, aluminogel, and mechanical mixtures of these, (b) the catalyst with 40% Al_2O_3 has the strongest catalytic action, but its porous structure is highly sensitive to water vapor, (c) the catalytic stability is increased with a higher Al_2O_3 content. There are 4 figures, 3 tables, and 13 references: 11 Soviet and 2 non-Soviet.

Card 3/4

Influence of the ...

The two references to English-language publications read as follows: P. B. Elkin, C. G. Shull, L. C. Roess, Ind. Eng. Chem., 37, 327, 1945; S. Brunauer, P. Emmett, E. Teller, J. Amer. Chem. Soc., 60, 309, 1938.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti (All-Union Scientific Research Institute of the Petroleum Industry)

SUBMITTED: June 2, 1960

Card 4/4

KALIKO, M.A.; PELEVINA, R.S.; PERVUSHINA, M.N.; FEDOTOVA, T.V.

Obtaining higher α-olefins of normal structure by the catalytic conversion of paraffins. Neftekhimiia 5 no.1: 24-32 Ja-F '65. (MIRA 18:5)

KALIKO, Yefim Lazarevich, kand.tekhn.nauk; VARGANOVA, A.N., red.izd-va; LELYUKHIN, A.A., tekhn.red.

[Construction of private dwellings] Postroika individual'nogo doma. Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1960. 285 p. (MIRA 14:1)

(Architecture, Domestic) (Building)

KALILOV, A. G.

Stratigraphy of Mesozoic Sediments in Hungary. Izv. AN Azerb. SSR. Ser. geol.-geog. nauk no.3:9-25 '60. (MIRA 13:10)
(Hungary--Geology, Stratigraphic)

TRAPITSYN, N.F.; VEPRIK, A.V.; KALIKOV, N.A.

Independence of the temperature of an d.c. high-voltage arc from the composition of the specimen. Izv. vys. ucheb. zav.; fiz. no.5:26-28 '62. (MIRA 15:12)

1. Kirgizskiy gosudarstvennyy universitet.
(Electric arc)

KALIKOV, N. P.

Kalikov, N. P. - "Processing pictures of mountainous regions for topographic stereometry", Sbornik nauch.-tekhn. i priozvod. statey po geodezii, kartografii, aeros"yemke i gravimetrii, Issue 22, 1948, p. 40-51.

SO: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 19, 1949).

KALIKOV, N. P.

"Plotting a Topographic Map of 1:25,000 Scale According to the Data of Aerial Photography in Plain and Mountainous Areas Using the Method of Differentiated Processes." Thesis for Degree of Cand. Technical Sci. Sub 23 Jun 50, Moscow Inst of Engineers of Geodesy, Aerial Photography, and Cartography

Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya Moskva. Jan-Dec 1950.

KALIKOV, N. P.

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 419 - I

BOOK Call No.: TA593.K6 1952

Author: KONSHIN, M. D., Dr. of Tech. Sci., Prof.
Full Title: AERIAL PHOTOTOPOGRAPHY, 2nd ed.
Transliterated Title: Aerofototopografiya

Publishing Data

Originating Agency: None
Publishing House: Publishing House for Geodetical and Cartographical Literature
Date: 1952 No. pp.: 360 No. of copies: 5,000
Editorial Staff: None
Others: Separate chapters were written by: Ch. 2 - P. V. Zakharov, Ch. 3, 5, and 11 - M. P. Kozhevnikov, Ch. 7 - N. P. Kalikov.

Text Data

Coverage: This is the second supplemented edition of a textbook dealing with Photogrammetrical methods for building topographical maps, which is mainly concerned with processes of field preliminary work, the plotting of the workable original of a map, and the stereophotogrammetrical photograph of a relief. The new edition includes the application in the topographic-geodetic work of stato-scopes, methods of photopolygonometry, and the use of the stereometer with additional correction devices.

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Aerofotetoporgrafiya AID 419 - I

This textbook is on a comparatively unadvanced level. It gives the principles of photogrammetry and methods of processing aerial negatives for plotting maps, but adds practically no information on the cameras and instruments used. No new or specially interesting data could be found.

KALIKOV, N.P., kandidat tekhnicheskikh nauk.

Stereoscopic drawing of a relief in the compilation of a topographic map at a scale of 1:10,000. Trudy TSNIIGAIK no.100: 149-166 '54. (MIRA 8:2)
(Topographical drawing)

KOZHEVNIKOV, Nikolay Petrovich; KRASHENINNIKOV, Georgiy Dmitrievich; KALIKOV, Nikolay Pavlovich; NORMANDSKAYA,O.B., redaktor; VASIL'YEVA, V.I., redaktor; KUZ'MIN,G.M., tekhnicheskiy redaktor

[Photogrammetry] Fotogrammetriia. Moskva, Izd-vo geodezicheskoi lit-ry, 1955. 492 p. (MLRA 9:4)
(Photographic surveying)

KALIKOV, N. P.

AUTHOR: Kalikov, N. P., Candidate of Technical Sciences. 6-12-5/14

TITLE: The Use of a Modernized Topographical Stereometer in Observations Counter the Light (Primeneniye modernizirovannogo topograficheskogo stereometra pri nablyudeniyakh na prosvet).

PERIODICAL: Geodeziya i Kartografiya, 1957, Nr 12, pp. 40-43 (USSR).

ABSTRACT: Three variants for the modernization of the topographical stereometers were carried out in the "Aerophototopographical Department" of the TsNIIGAiK (Tsentral'nyy nauchno-issledovatel'skiy institut geodezii, aeros"yemki i kartografii) / Central Scientific Research Institute for Geodesy, Air Phototopography and Cartography. The third variant proved to be the best one: additional film holders were set up on the STD-2. Two incandescent lamps were used for illuminate the film holders from below and shift simultaneously with the visual-system of the device. (It was a proposal of the TsNIIGAiK). This variant was the best, because the convenience in observation was here paired with the uniform illumination of the field of view. In all three variants the following was kept: the existing motions of the parts of apparatus, the optical system, the system of illumination and - the work of the correcting devices was not disturbed. Reference is made to the surveys carried out in 1955 and 1956 with

Card 1/3

The Use of a Modernized Topographical Stereometer in Observations Counter the Light. 6-12-5/14

There are 2 figures, and 2 Slavic references.

AVAILABLE: Library of Congress.

Card 3/3

153-157, and 158-170 by Candidate of Technical Sciences G. D. Krasheninnikov; sections 1-4, 58-62, 81-93, 97, and 171-172 by Candidate of Technical Sciences N. P. Kalikov. The author thanks K. N. Gurtsenova and O. B. Normandskaya. There are 46 references: 44 Soviet and 2 German.

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Ch. I. Introduction
1. The subject of photogrammetry and its mission 5
2. The aerial camera. Aerial survey work 6
3. Methods of making topographic maps from aerial surveys 9
4. Brief notes on the development of aerial mapping in the USSR 11

KALIKSHTEYN, D. B.; BELANOVA, Ye. A.

Aneurysms

Cardiac aneurysms. Klin. med. 31, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

KALIKSHTEYN, D. B., Cand of Med Sci -- (diss) "Certain peculiarities of breathing in hypertonic patients." Kuybyshev, 1957, 18 pp (Kuybyshev State Medical Institute), 200 copies (KL, 37-57, 104)

KALIKSHTEYN, D. B.

USSR/Human and Animal Physiology. Respiration. T

Abs Jour: Ref Zhur-Biol., No 8, 1958, 36505.

Author : Kalikshteyn, D.B.
Inst : Kuibishevski Medical Institute.
Title : Some Peculiarities of Respiration in Hypertensives.

Orig Pub: Avtoref. dis. kand. med. n. kuibishevsk. med. in-t, kuibishev, 1957.

Abstract: No abstract.

Card : 1/1

KALILOV, T.

554 Opyt znatnogo konevoda koshoyeva. /Plem. sovkhoz im. Il'icha, Kirgiz. SSR/. M., Goskul'tprosvetizdat, 1954. 8 s. s ill. 22 sm. (Vsesoyuz. s-kh. Vystavka). 8.000 ekz. 5 k.-Na obl. avt. n e ukazan.-/54-54696/ p 636.1.083 sr (584.8) + 331 (47) (092 Koshoyev)

SO: Knishnaya Letopis, Vol. 1, 1955

KALIMAN, P. A., Cand of Bio Sci -- (diss) "Investigation of adrenalin changes in animals under normal conditions and under experimental pathological condition of the cardiovascular system." Khar'kov , 1957, 18 pp (Khar'kov State Medical Institute), 200 copies (KL, 35-57,106)

KALIMAN, P.A. (Khar'kov)

Urinary excretion of adrenalin and adrenalinlike substances in normal rabbits and during experimental alimentary hypercholesterolemia and atherosclerosis [with summary in English]. Probl.endok. i gorm. 4 no.2: 26-30 Mr-Ap '58 (MIRA 11:5)

1. Iz kafedry biologicheskoy khimii (zav. - chlen-korrespondent AN USSR prof. A.M. Utevskiy) Khar'kovskogo meditsinskogo instituta (dir. - dotsent I.F. Kononenko).

(EPINEPHRINE, in urine
excretion exper. alimentary hypercholesteroloemia & atherosclerosis in rabbits (Rus))
(CHOLESTRREROL, in blood
excess, exper.dietary induction, urinary excretion of epinephrine in (Rus))
(ARTERIOSCLEROSIS, experimental
urinary excretion of epinephrine in alimentary atherosclerosis in rabbits (Rus))

KALIMAN, P.A. (Khar'kov)

Urinary excretion of adrenaline and adrenaline-like substances in experimental renal hypertension. Probl. endok. i gorm. 5 no.2:10-15 Mr-Ap '59. (MIRA 12:7)

1. Iz kafedry biologicheskoy khimii (zav. - chlen-korrespondent Akademii nauk USSR prof. A. M. Utevskiy) Khar'kovskogo meditsinskogo instituta (dir. - dotsent I.F. Kononenko).

(EPINEPHRINE, in urine,
in exper. renal hypertension (Rus))
(SYMPATHOMIMETICS, in urine,
same)
(HYPERTENSION, exper.
renal, urinary epinephrine & epinephrine-like substances (Rus))

KALIMAN, P.A.

Quantiative determination of adrenaline and noradrenaline in urine by means of a fluorescent method. Vop. med. khim. 6 no. 6:635-640 N-D '60. (MIRA 14:4)

1. Chair of Biochemistry of the Kharkov Medical Institute.
(ADRENALINE) (NORADRENALINE) (URINE--ANALYSIS AND PATHOLOGY)

KALIMAN, P. A. (USSR).

Types of Enzymic Oxidation of Adrenaline and Noradrenaline in the Cell Elements of Liver and Heart.

report presented at the 5th Int'l.
Biochemistry Congress, Moscow, 10-16 Aug. 1961

MALAYA, L.T., prof.; UTEVSKIY, A.M., prof.; KALIMAN, P.A., kand. biologicheskikh nauk; LOGINOVA, G.A.

Study of some processes of catechol amine metabolism in rheumatic fever (Sokol'skii - Bouillaud's disease). Vop. revm. 1 no.3:52-57 Jl-S '61. (MIRA 16:4)

1. Iz kafedry fakul'tetskogospital'noy terapii sanitarno-gigiyenicheskogo i pediatricheskogo fakul'tetov (zav. - prof. L.T.Malaya) i kafedry biokhimii (zav. - chlen-korrespondent AN UkrSSR prof. A.M.Utevskiy) Khar'kovskogo meditsinskogo instituta (dir. - dotsent B.A.Zadorozhnyy).
(RHEUMATIC HEART DISEASE) (ADRENALINE)

KALIMAN, P.A.

Enzymatic oxidation of adrenaline, noradrenaline, and tyramine in the liver and heart of rabbits. Biokhimiia 26 no.2:284-289 Mr-Ap '61. (MIRA 14:5)

1. Chair of Biochemistry, Medical Institute, Kharkov.
(ADRENALINE) (ARTERENOL) (TYRAMINE)
(OXIDATION, PHYSIOLOGICAL)

KALIMAN, P.A.; KOSHLYAK, T.V.

Oxidation of adrenaline in the organs and tissues of white rats. Biokhimiia 26 no.4:729-735 Jl-Ag '61. (MIRA 15:6)

1. Chair of Biochemistry, Medical Institute, Kharkov.
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KALIMAN, P.A.

Adsorption-fluorometric method of quantitative determination of the free and bound adrenaline and noradrenaline in the urine. Vop. med. khim. 8 no.4:407-411 Jl-Ag '62.

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MALAYA, L.T., prof.; UTEVSKIY, A.M., prof.; KALIMAN, P.A., kand.biol.nauk; LOGINOVA, G.A.

Study of some processes of catecholamine metabolism in collagenoses. Vrach.delo no.2:10-16 F '63. (MIRA 16:5)

1. Kafedra gospital'noy terapii (zav. - prof. L.T. Malaya) i kafedra biokhimii (zav. - chlen-korrespondent AN UkrSSR, prof. A.M. Utevskiy) lechebnogo fakul'teta Khar'kovskogo meditsinskogo instituta.
(ADRENALINE) (COLLAGEN DISEASES)